

In the Claims

Claim 1 (Currently amended): A method of forming a monolayer of functionalized silicon on a substrate surface, the functionalized silicon including an organic group covalently attached with the silicon, the method comprising exposing the substrate surface to a precursor comprising the functionalized silicon, the precursor interacting with the substrate to form the monolayer across at least a portion of the surface of the substrate; and wherein the exposing of the substrate surface to the precursor occurs in a supercritical fluid comprising one or more members of the group consisting of ammonia, freons, nitrogen, and noble gases, ~~hydrocarbons and aromatic compounds~~, wherein the substrate comprises a glass fiber; and further comprising, after forming the monolayer, incorporating the glass fiber into a fiberglass matrix by bonding the organic group within a polymeric material.

Claims 2-13 (Canceled)

Claim 14 (original): The method of claim 1 further comprising forming a film of water across a surface of the substrate prior to the exposing of the substrate to the precursor.

Claim 15 (original): The method of claim 1 wherein the precursor is selected from the group consisting of siloxanes, silazanes and chlorosilanes.

Claims 16-29 (canceled).

Claim 30 (Currently amended): A method of functionalizing an oxygen-containing surface, comprising exposing the surface to precursor molecules, the precursor molecules comprising core atoms from which crosslinking atoms and functional groups extend; the precursor molecules interacting with the oxygen of the oxygen-containing surface to form a monolayer across at least a portion of the surface, the monolayer layer comprising the functional groups; and wherein the exposing of the oxygen-containing surface to the precursor molecules occurs in a supercritical ~~or non-supercritical~~ fluid comprising ~~one or more members of the group consisting of~~ ammonia, hydrocarbons and aromatic compounds, wherein the surface is a surface of a glass fiber; and further comprising, after forming the monolayer, incorporating the glass fiber into a fiberglass matrix by bonding the monolayer within a polymeric material.

Claim 31 (canceled).

Claim 32 (original): The method of claim 30 wherein the core atoms are silicon.

Claim 33 (original): The method of claim 32 wherein the precursor molecules are selected from the group consisting of siloxanes, silazanes and chlorosilanes.

Claims 34-58 (canceled).